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(FILE 'HOME' ENTERED AT 19:14:48 ON 30 JUL 2001)

FILE 'HCAPLUS' ENTERED AT 19:14:55 ON 30 JUL 2001
E MUTATION/CT
E E3+ALL

L1 FILE 'REGISTRY' ENTERED AT 19:15:29 ON 30 JUL 2001
1 S 9001-41-6/RN

FILE 'HCAPLUS' ENTERED AT 19:15:37 ON 30 JUL 2001

L2 FILE 'REGISTRY' ENTERED AT 19:15:44 ON 30 JUL 2001
SET SMARTSELECT ON
SEL L1 1- CHEM : 21 TERMS
SET SMARTSELECT OFF

L3 FILE 'HCAPLUS' ENTERED AT 19:15:45 ON 30 JUL 2001
4791 S L2
L4 114 S L3 AND (ESCHERICHIA COLI OR E# COLI OR PARACOLOBACTRUM COLIFO
L5 52 S L4 AND MUTA?
L6 1 S L5 AND PURIN?
L7 1 S L5 AND (ADENOSINE# OR GUANOSINE# OR INOSINE# OR XANTHOSINE#)

=> d ibib ab 1

L7 ANSWER 1 OF 1 HCAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 1999:77676 HCAPLUS

DOCUMENT NUMBER: 130:152661

TITLE: Escherichia containing **mutants** of enzymes associated with improved biosynthesis of purine nucleosides by fermentation

INVENTOR(S): Matsui, Hiroshi; Kawasaki, Hisashi; Shimaoka, Megumi; Takenaka, Yasuhiro; Kurahashi, Osamu

PATENT ASSIGNEE(S): Ajinomoto Co., Inc., Japan

SOURCE: PCT Int. Appl., 72 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9903988	A1	19990128	WO 1998-JP3239	19980717
W: BR, CN, ID, JP, KR, US				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
EP 1004663	A1	20000531	EP 1998-932584	19980717
R: DE, FR, GB, IT				
PRIORITY APPLN. INFO.:			JP 1997-194603	19970718
			WO 1998-JP3239	19980717

AB An Escherichia strain capable of producing purine nucleosides with improved yield is characterized as having (1) a PRPP (phosphoribosyl pyrophosphate) amidotransferase (encoded by gene purF) or PRPP synthase (gene prs) **mutant** lacking feedback inhibition; (2) inactivated purine repressor; (3) blocked synthetic pathway catalyzed by, e.g., succinyl-adenosine monophosphate synthase, that leads to the synthesis of other metabolic products; and/or (4) reduced ability of the nucleoside permease-regulated cellular up-taking of purine nucleosides. Prepn. of **mutants** from **Escherichia coli** K12 strain W3110 was demonstrated.

REFERENCE COUNT: 6

REFERENCE(S): (1) Kyowa Hakko Kogyo Co Ltd; JP 2500062 A
(2) Kyowa Hakko Kogyo Co Ltd; EP 282989 A HCAPLUS
(4) Kyowa Hakko Kogyo Co Ltd; EP 406436 A HCAPLUS
(5) Kyowa Hakko Kogyo Co Ltd; JP 63230094 A 1988 HCAPLUS
(6) Kyowa Hakko Kogyo Co Ltd; WO 9005784 A 1990 HCAPLUS

ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> d his

(FILE 'HOME' ENTERED AT 18:25:51 ON 30 JUL 2001)

L1 FILE 'HCAPLUS' ENTERED AT 18:26:05 ON 30 JUL 2001
3389 S 9001-41-6/RN

L2 FILE 'REGISTRY' ENTERED AT 18:28:12 ON 30 JUL 2001
1 S 9001-41-6/RN

FILE 'HCAPLUS' ENTERED AT 18:28:24 ON 30 JUL 2001

L3 FILE 'REGISTRY' ENTERED AT 18:28:29 ON 30 JUL 2001
SET SMARTSELECT ON
SEL L2 1- CHEM : 21 TERMS
SET SMARTSELECT OFF

L4 FILE 'HCAPLUS' ENTERED AT 18:28:30 ON 30 JUL 2001
4791 S L3
L5 77 S L4 (L) PREP/RL
L6 5917 S PURINE NUCLEOSIDE# OR NUCLEOSIDES (L) PURINE OR PURINE RIBONU
L7 604 S L6 (L) PREP/RL
L8 4791 S L3
L9 1 S L7 AND L8

FILE 'CROPU, DGENE, DPCI, ENCOMPPAT, ENCOMPPAT2, EUROPATFULL, HCAOLD,
HCAPLUS, IFIPAT, INPADOC, JAPIO, PAPERCHEM2, PATDD, PATDPA, PATOSDE,
PATOSEP, PATOSWO, PCTFULL, PIRA, RAPRA, SYNTHLINE, TULSA, TULSA2,
USPATFULL, WPIDS' ENTERED AT 18:31:33 ON 30 JUL 2001

L10 FILE 'REGISTRY' ENTERED AT 18:31:53 ON 30 JUL 2001
SET SMARTSELECT ON
SEL L2 1- CHEM : 21 TERMS
SET SMARTSELECT OFF

L11 FILE 'CROPU, DGENE, DPCI, ENCOMPPAT, ENCOMPPAT2, EUROPATFULL, HCAOLD,
HCAPLUS, IFIPAT, INPADOC, JAPIO, PAPERCHEM2, PATDD, PATDPA, PATOSDE,
PATOSEP, PATOSWO, PCTFULL, PIRA, RAPRA, SYNTHLINE, TULSA, TULSA2,
USPATFULL, WPIDS' ENTERED AT 18:31:54 ON 30 JUL 2001
7616 S L10
L12 13273 S PURINE NUCLEOSIDE# OR NUCLEOSIDES (L) PURINE OR PURINE RIBONU
L13 1758 S L12 AND PREP/RL
L14 1 S L13 AND L11
L15 111 S L12 AND L11 AND (ESCHERICHIA COLI OR E# COLI OR PARACOLOBACTR
L16 74 S L15 AND FERMENT?
L17 70 DUP REM L16 (4 DUPLICATES REMOVED)
L18 9 S L17 AND PY<=1997

=> d ibib ab 1-9

L18 ANSWER 1 OF 9 EUROPATFULL COPYRIGHT 2001 WILA

GRANTED PATENT - ERTEILTES PATENT - BREVET DELIVRE

ACCESSION NUMBER: 504279 EUROPATFULL EW 199728 FS PS
TITLE: **FERMENTATION** PROCESS FOR THE PRODUCTION OF
PYRIMIDINE DEOXYRIBONUCLEOSIDES.
FERMENTATIONSPROZESS ZUR HERSTELLUNG VON
PYRIMIDIN.
PROCEDE DE **FERMENTATION** POUR PRODUIRE DES
DESOXYRIBONUCLEOSIDES DE PYRIMIDINE.
INVENTOR(S): McDANDLISS, Russell, J., 939 Pointer Ridge Drive,
Gaithersburg, MD 20078, US;
ANDERSON, David, M., 13509 Bailey Drive, Rockville, MD
20850, US
PATENT ASSIGNEE(S): CHEMGEN CORPORATION, 16016 Industrial Drive,
Gaithersburg, MD 20877, US
PATENT ASSIGNEE NO: 1075720
AGENT: Mercer, Christopher Paul, Carpmiels & Ransford 43,
Bloomsbury Square, London WC1A 2RA, GB
AGENT NUMBER: 46611
OTHER SOURCE: EPB1997043 EP 0504279 B1 970709
SOURCE: Wila-EPS-1997-H28-T1
DOCUMENT TYPE: Patent
LANGUAGE: Anmeldung in Englisch; Veroeffentlichung in Englisch
DESIGNATED STATES: R AT; R BE; R CH; R DE; R DK; R ES; R FR; R GB; R GR; R
IT; R LI; R LU; R NL; R SE
PATENT INFO.PUB.TYPE: EPB1 EUROPAEISCHE PATENTSCHRIFT (Internationale
Anmeldung)
PATENT INFORMATION:
PATENT NO KIND DATE

EP 504279 B1 19970709
'OFFENLEGUNGS' DATE: 19920923
APPLICATION INFO.: EP 1991-901364 19901205
PRIORITY APPLN. INFO.: US 1989-448158 19891208
RELATED DOC. INFO.: WO 90-US6993 901205 INTAKZ
WO 9109130 910627 INTPNR
REFERENCE PAT. INFO.: EP 329062 A EP 344937 A
REF. NON-PATENT-LIT.: JOURNAL OF BIOLOGICAL CHEMISTRY, vol. 211, no. 21, 10
November 1966; H.V. APOSHIAN et al., pp. 5095-5101
METHODS IN ENZYMOLOGY, R. WU et al. (eds.), vol. 154,
1987, Academic Press, New York, NY (US); pp. 367-382
F.C. NEIHARDT et al. (eds.), "Escherchia Coli and
Salmonella Typhymurium Cellular & Molecular Biology",
vol. 2, 1987, American Society for Microbiology,
Washington, DC (US); pp. 1276-1301 JOURNAL OF BIOLOGICAL
CHEMISTRY, vol. 261, no. 24, 25 August 1986; C.G. LERNER
et al., pp. 11156-11165 JOURNAL OF BACTERIOLOGY, vol.
169, no. 5, May 1987; C.G. LERNER et al., pp. 2202-2206
A. MUNCH-PETERSEN (ed.), "Metabolism of Necleotides,
Nucleosides & Nucleobases in Microorganisms", 1983,
Academic Press, London (GB); pp. 203-258 F.C. NEIHARDT
et al., (eds.), "Escherichia Coli & Salmonella
Typhymurium Cellular & Molecular Biology", 1987,
American Society for Microbiology, Washington, DC (US);
pp. 445-473 JOURNAL OF BACTERIOLOGY, vol. 137, no. 1,
January 1979; T.J. PAULUS et al., pp. 82-91 JOURNAL OF
BACTERIOLOGY, vol. 163, no. 3, September 1985; K.L.
ROLAND et al., pp. 991-999 VIROLOGY, vol. 29, no. 1, May
1966; D.H. ROSCOE et al., pp. 157-167 ENZYME MICROBIAL
TECHNOLOGY, vol. 6, January 1984; R.T. ROWLANDS, pp.

3-10 ANNUAL REVIEW OF BIOCHEMISTRY, vol. 48, E.E. Snell et al. (eds.), 1979; pp. 133-158 JOURNAL OF BACTERIOLOGY, vol. 160, no. 1, October 1983; YAKOBSON et al., pp. 451-453 THE EMBO JOURNAL, vol. 1, no. 1, 1982; K.F. JENSEN et al., pp. 69-74

L18 ANSWER 2 OF 9 EUROPATFULL COPYRIGHT 2001 WILA

PATENT APPLICATION - PATENTANMELDUNG - DEMANDE DE BREVET

ACCESSION NUMBER: 277313 EUROPATFULL EW 198832 FS OS STA B
 TITLE: Hybrid plasminogen activators.
 Hybride Plasminogenaktivatoren.
 Activateur de plasminogene hybride.
 INVENTOR(S): Rajput, Bhanu, Dr., Pfeffingerstrasse 61, CH-4053 Basel, CH;
 Chaudhuri, Bhabatosh, Dr., Maulbeerstrasse 15, CH-4058 Basel, CH;
 Asselbergs, Fredericus Alphonsus Maria, Dr., Rainallee 88/3, CH-4125 Riehen, CH;
 Meyhack, Bernd, Dr., Hoehenweg 9, CH-4312 Magden, CH;
 Heim, Jutta, Dr., Rankackerweg 1, CH-4133 Pratteln, CH;
 van Oostrum, Jan, Dr., Melchior Berristrasse 10, CH-4142 Muenchenstein, CH;
 Alkan, Sefik, Prof. Dr., Binsenackerstrasse 3, CH-4125 Riehen, CH
 PATENT ASSIGNEE(S): CIBA-GEIGY AG, Klybeckstrasse 141, CH-4002 Basel, CH
 PATENT ASSIGNEE NO: 201300
 AGENT: Zumstein, Fritz, Dr., et al, Braeuhausstrasse 4, D-8000 Muenchen 2, DE
 OTHER SOURCE: ESP1988028 EP 0277313 A1 880810
 SOURCE: Wila-EPZ-1988-H32-T1
 DOCUMENT TYPE: Patent
 LANGUAGE: Anmeldung in Englisch; Veroeffentlichung in Englisch
 DESIGNATED STATES: R AT; R BE; R CH; R DE; R ES; R FR; R GB; R GR; R IT; R LI; R LU; R NL; R SE
 PATENT INFO.PUB.TYPE: EPA1 EUROPAEISCHE PATENTANMELDUNG
 PATENT INFORMATION:

PATENT NO	KIND	DATE
EP 277313	A1	19880810
		19871203
		19861205
		19870120
		19870423
		19870706

GRANTED PATENT - ERTEILTES PATENT - BREVET DELIVRE

ACCESSION NUMBER: 277313 EUROPATFULL EW 199704 FS PS
 TITLE: Hybrid plasminogen activators.
 Hybride Plasminogenaktivatoren.
 Activateur de plasminogene hybride.
 INVENTOR(S): Rajput, Bhanu, Dr., Pfeffingerstrasse 61, CH-4053 Basel, CH;
 Chaudhuri, Bhabatosh, Dr., Maulbeerstrasse 15, CH-4058 Basel, CH;
 Asselbergs, Fredericus Alphonsus Maria, Dr., Rainallee 88/3, CH-4125 Riehen, CH;
 Meyhack, Bernd, Dr., Hoehenweg 9, CH-4312 Magden, CH;
 Heim, Jutta, Dr., Rankackerweg 1, CH-4133 Pratteln, CH;
 van Oostrum, Jan, Dr., Melchior Berristrasse 10, CH-4142 Muenchenstein, CH;

Alkan, Sefik, Prof. Dr., Binsackstrasse 3, CH-4125
 Riehen, CH
 PATENT ASSIGNEE(S): CIBA-GEIGY AG, Klybeckstrasse 141, 4002 Basel, CH
 PATENT ASSIGNEE NO: 201300
 AGENT: Zumstein, Fritz, Dr. et al, Patentanwalte, Dr. F.
 Zumstein, Dipl.-Ing. F. Klingseisen, Braeuhausstrasse 4,
 80331 Muenchen, DE
 AGENT NUMBER: 13567
 OTHER SOURCE: EPB1997007 EP 0277313 B1 970122
 SOURCE: Wila-EPS-1997-H04-T1
 DOCUMENT TYPE: Patent
 LANGUAGE: Anmeldung in Englisch; Veroeffentlichung in Englisch
 DESIGNATED STATES: R AT; R BE; R CH; R DE; R ES; R FR; R GB; R GR; R IT; R
 LI; R LU; R NL; R SE
 PATENT INFO.PUB.TYPE: EPB1 EUROPAEISCHE PATENTSCHRIFT
 PATENT INFORMATION:

PATENT NO	KIND	DATE
EP 277313	B1	19970122

'OFFENLEGUNGS' DATE: 19880810
 APPLICATION INFO.: 19871203
 PRIORITY APPLN. INFO.: GB 1986-29153 19861205
 GB 1987-1160 19870120
 GB 1987-9656 19870423
 GB 1987-15890 19870706
 REFERENCE PAT. INFO.: EP 155387 A EP 231883 A
 WO 87-04722 A
 REF. NON-PATENT-LIT.: JOURNAL OF BIOLOGICAL CHEMISTRY, vol. 262, no. 24, 25
 August 1987, American Society for Biochemistry &
 Molecular Biology Inc., Baltimore, MD (US); L. PIERARD
 et al., pp. 11771-11778; and D. GHEYSEN et al., pp.
 11779-11784 BIOLOGICAL ABSTRACTS/RRM, Philadelphia, PA
 (US); C.J.M. DE VRIES et al., no.34017897 & Thrombosis
 and Haemostatis 1987. vol. 58, no. 1 p314 BIOLOGICAL
 ABSTRACTS/RRM, Philadelphia, PA (US); S.G. LEE et al.,
 no 34017896 & Thrombosis and haemostasis 1987, vol.58,
 no p313 CIRCULATION, vol. 77, no. 4, 1988; C.L. LUCORE
 et al., pp. 906-914 The journal of biological chemistry,
 vol. 262, no. 24, 25th August 1987, pages 11779-11784,
 The American Society for Biochemistry and Molecular
 Biology Inc., Baltimore, US; D. Gheysen et al
 ABEN Novel single-chain hybrid plasminogen activators having an amino acid
 sequence composed of at least two subsequences corresponding in amino
 acid identity and number to subsequences of human t-PA and of human
 u-PA, and mutants thereof in which at least one of the N-glycosylation
 sites is modified such that glycosylation cannot take place at these
 sites exhibit valuable pharmacological properties. The hybrid plas.shy.
 minogen activators are produced by recombinant DNA technology.

L18 ANSWER 3 OF 9 PCTFULL COPYRIGHT 2001 MicroPatent
 ACCESSION NUMBER: 1997009427 PCTFULL
 TITLE (ENGLISH): VEGF-RELATED PROTEIN
 TITLE (FRENCH): PROTEINE APPARENTEE AU VEGF
 INVENTOR(S): LEE, James; WOOD, William
 PATENT ASSIGNEE(S): GENENTECH, INC.
 LANGUAGE OF PUBL.: English
 DOCUMENT TYPE: Patent
 PATENT INFORMATION:

NUMBER	KIND	DATE
WO 9709427	A1	19970313

DESIGNATED STATES: AL AM AT AU AZ BB BG BR BY CA CH CN CU CZ DE DK EE ES
 FI GB GE HU IL IS KG KP KR KZ LC LK LR LS LT LU LV MD

MG MK MN MW MX NO NZ PL PT RO RU SD SI SK TJ TM TR TT
 UA UG UZ VN KE LS MW SD SZ UG AM AZ BY KG KZ MD RU TJ
 BE CH DE DK ES FI FR GB GR IE IT LU MC NL PT SE BF BJ
 CF CG CI CM GA GN NE SN TD TG

APPLICATION INFO.: WO 1996-US14075 19960830
 PRIORITY (ORIGINAL): US 1995-60/003491 19950908

ABEN A human VEGF-related protein (VRP) has been identified and isolated that binds to, and stimulates the phosphorylation of, the receptor tyrosine kinase Flt4. The VRP is postulated to be a third member of the VEGF protein family. Also provided are antibodies that bind to VRP and neutralize a biological activity of VRP, compositions containing the VRP or antibody, methods of use, chimeric polypeptides, and a signal polypeptide for VRP.

ABF Une proteine (VRP) apparentee au facteur de croissance vasculo-endothelial humain (VEGF) a ete identifiee et isolee. Cette proteine se lie au recepteur Flt4 tyrosine kinase et stimule la phosphorylation de ce recepteur. Cette proteine constitue, on le suppose, un troisieme element de la famille des proteines VEGF. L'invention porte egalement sur des anticorps qui se lient a cette proteine et qui en neutralisent l'activite biologique, des compositions renfermant cette proteine ou son anticorps, des methodes d'utilisation, des polypeptides chimeriques et un polypeptide signalant cette proteine.

L18 ANSWER 4 OF 9 PCTFULL COPYRIGHT 2001 MicroPatent
 ACCESSION NUMBER: 1996033276 PCTFULL
 TITLE (ENGLISH): NUCLEOTIDE SEQUENCE OF THE HAEMOPHILUS INFLUENZAE Rd GENOME,
 FRAGMENTS THEREOF, AND USES THEREOF
 TITLE (FRENCH): SEQUENCE NUCLEOTIDIQUE DU GENOME HAEMOPHILUS INFLUENZAE RD, DES
 FRAGMENTS DE CE DERNIER, AINSI QUE SES APPLICATIONS
 INVENTOR(S): FLEISCHMANN, Robert, D.; ADAMS, Mark, D.; WHITE, Owen;
 SMITH, Hamilton, O.; VENTER, J., Craig
 PATENT ASSIGNEE(S): HUMAN GENOME SCIENCES, INC.; JOHNS HOPKINS UNIVERSITY
 LANGUAGE OF PUBL.: English
 DOCUMENT TYPE: Patent
 PATENT INFORMATION:

NUMBER	KIND	DATE
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WO 9633276	A1 19961024	
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DESIGNATED STATES: AL AM AT AU AZ BB BG BR BY CA CH CN CZ DE DK EE ES FI
 GB GE HU IS JP KE KR KZ LK LR LS LT LU LV MD MG MK MN
 MW MX NO NZ PL PT RO RU SD SE SG SI TM TR TT UA UG UZ
 VN KE LS MW SD SZ UG AM AZ BY KG KZ MD RU TJ TM AT BE
 DK ES FI FR GB GR IE IT LU MC NL PT SE BF BJ CF CG CI
 CM GA GN ML MR NE TG

APPLICATION INFO.: WO 1996-US5320 19960422
 PRIORITY (ORIGINAL): US 1995-8/426787 19950421
 US 1995-8/476102 19950607
 US 1995-8/487429 19950607

ABEN The present invention provides the sequencing of the entire genome of Haemophilus influenzae Rd, SEQ ID NO:1. The present invention further provides the sequence information stored on computer readable media, and computer-based systems and methods which facilitate its use. In addition to the entire genomic sequence, the present invention identifies over 1700 protein encoding fragments of the genome and identifies, by position relative to a unique Not I restriction endonuclease site, any regulatory elements which modulate the expression of the protein encoding fragments of the Haemophilus genome.

ABF La presente invention porte sur le sequencage de la totalite du genome d'Haemophilus influenzae Rd, SEQ ID NO.1. Elle concerne egalement les donnees de sequencage enregistrees sur support informatique, ainsi que les systemes informatiques et les procedes facilitant son utilisation. Outre la totalite de la sequence genomique, plus de 1700

fragments a codage proteique du genome sont identifies. Est egalement identifie de par son positionnement par rapport a un site a enzyme de restriction Not I, tout element regulateur qui module l'expression des fragments a codage proteique du genome Haemophilus.

L18 ANSWER 5 OF 9 PCTFULL COPYRIGHT 2001 MicroPatent
 ACCESSION NUMBER: 1992003556 PCTFULL
 TITLE (ENGLISH): PURIFIED THERMOSTABLE NUCLEIC ACID POLYMERASE ENZYME FROM
 TERMOTOGA MARITIMA
 TITLE (FRENCH): ENZYME D'ACIDE NUCLEIQUE THERMOSTABLE PURIFIEE
 PROVENANT DE
 L'EUBACTERIE THERMOTOGA MARITIMA
 INVENTOR(S): GELFAND, David, H.; LAWYER, Frances, C.; STOFFEL, Susanne
 PATENT ASSIGNEE(S): CETUS CORPORATION; GELFAND, David, H.; LAWYER, Frances, C.; STOFFEL, Susanne
 LANGUAGE OF PUBL.: English
 DOCUMENT TYPE: Patent
 PATENT INFORMATION:

NUMBER	KIND	DATE
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WO 9203556	A1 19920305	
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DESIGNATED STATES:	AT AU BE CA CH DE DK ES FR GB GR IT JP LU NL SE US
APPLICATION INFO.:	WO 1991-US5753 19910813
PRIORITY (ORIGINAL):	US 1990-567244 19900813

ABEN A purified thermostable enzyme is derived from the eubacterium Thermotoga maritima. The enzyme has a molecular weight as determined by gel electrophoresis of about 97 kilodaltons and DNA polymerase I activity. The enzyme can be produced from native or recombinant host cells and can be used with primers and nucleoside triphosphates in a temperature-cycling chain reaction where at least one nucleic acid sequence is amplified in quantity from an existing sequence.

ABF On a extrait une enzyme thermostable purifiee de l'eubacterie Thermotoga maritima. Cette enzyme a un poids moleculaire determine par electrophorese sur gel d'environ 97 kilodaltons et une activite de polymerase I d'ADN. L'enzyme peut etre produite a partir de cellules hotes recombinantes ou naturelles et elle peut etre utilisee avec des initiateurs et des triphosphates de **nucleosides** dans une reaction en chaine a cycles thermiques dans laquelle au moins une sequence d'acide nucleique voit son nombre augmenter par rapport a la sequence existante.

L18 ANSWER 6 OF 9 PCTFULL COPYRIGHT 2001 MicroPatent
 ACCESSION NUMBER: 1991009130 PCTFULL
 TITLE (ENGLISH): **FERMENTATION** PROCESS FOR THE PRODUCTION OF PYRIMIDINE DEOXYRIBONUCLEOSIDES
 TITLE (FRENCH): PROCEDE DE **FERMENTATION** POUR PRODUIRE DES DESOXYRIBONUCLEOSIDES DE PYRIMIDINE
 INVENTOR(S): McDANDLISS, Russell, J.; ANDERSON, David, M.
 PATENT ASSIGNEE(S): CHEMGEN CORPORATION
 LANGUAGE OF PUBL.: English
 DOCUMENT TYPE: Patent
 PATENT INFORMATION:

NUMBER	KIND	DATE
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WO 9109130	A1 19910627	
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DESIGNATED STATES:	AT AU BE CA CH DE DK ES FR GB GR IT JP KR LU NL SE
APPLICATION INFO.:	WO 1990-US6993 19901205
PRIORITY (ORIGINAL):	US 1989-448158 19891208

ABEN DNA coding for at least one enzyme that causes the accumulation of a pyrimidine deoxyribonucleoside is used, in conjunction with

metabolic mutations or heterologous DNA coding for metabolic enzymes that also increase pyrimidine deoxyribonucleoside production, to engineer cultured cells to express a pyrimidine deoxyribonucleoside (PdN) in recoverable quantities, providing a commercially useful **fermentation** source for PdNs.

ABF On utilise le codage de l'ADN pour au moins un enzyme qui provoque l'accumulation d'un desoxyribonucleoside de pyrimidine, conjointement a des mutations metaboliques ou un codage d'ADN heterologue pour des enzymes metaboliques qui font egalement augmenter la production de desoxyribonucleoside de pyrimidine, pour mettre au point un desoxyribonucleoside de pyrimidine (PdN) en quantites que l'on puisse recuperer, ceci constituant alors une source de **fermentation** utile pour les desoxyribonucleosides de pyrimidine (PdNs) utilisable au niveau commercial.

L18 ANSWER 7 OF 9 USPATFULL

ACCESSION NUMBER: 94:110696 USPATFULL
TITLE: DNA encoding a thermostable nucleic acid polymerase enzyme from thermotoga maritima
INVENTOR(S): Gelfand, David H., Oakland, CA, United States
Lawyer, Frances C., Oakland, CA, United States
PATENT ASSIGNEE(S): Hoffmann-La Roche Inc., Nutley, NJ, United States (U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 5374553		19941220	<--
APPLICATION INFO.:	US 1990-567244		19900813 (7)	
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. US 1988-143441, filed on 12 Jan 1988, now abandoned which is a continuation-in-part of Ser. No. US 1987-63509, filed on 17 Jun 1987, now patented, Pat. No. US 4889818 which is a continuation-in-part of Ser. No. US 1986-899241, filed on 22 Aug 1986, now abandoned			
DOCUMENT TYPE:	Utility			
FILE SEGMENT:	Granted			
PRIMARY EXAMINER:	Wax, Robert A.			
ASSISTANT EXAMINER:	Hendricks, Keith D.			
LEGAL REPRESENTATIVE:	Gould, George M., Tramaloni, Dennis P., Sias, Stacey R.			
NUMBER OF CLAIMS:	8			
EXEMPLARY CLAIM:	1			
LINE COUNT:	2092			
CAS INDEXING IS AVAILABLE FOR THIS PATENT.				

AB A purified thermostable enzyme is derived from the eubacterium Thermotoga maritima. The enzyme has a molecular weight of about 97 kilodaltons and DNA polymerase I activity. The enzyme can be produced from native or recombinant host cells and can be used with primers and nucleoside triphosphates in a temperaturecycling chain reaction where at least one nucleic acid sequence is amplified in quantity from an existing sequence.

L18 ANSWER 8 OF 9 USPATFULL

ACCESSION NUMBER: 93:41991 USPATFULL
TITLE: **Fermentation** process for the production of pyrimidine deoxyribonucleosides
INVENTOR(S): McCandliss, Russell J., Gaithersburg, MD, United States
Anderson, David M., Rockville, MD, United States
PATENT ASSIGNEE(S): Chemgen Corporation, Gaithersberg, MD, United States (U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 5213972		19930525	<--

APPLICATION INFO.: US 1989-448158 19891208 (7)
DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Wax, Robert A.
ASSISTANT EXAMINER: Moore, William W.
LEGAL REPRESENTATIVE: Foley & Lardner
NUMBER OF CLAIMS: 20
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 17 Drawing Figure(s); 14 Drawing Page(s)
LINE COUNT: 1658

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB DNA coding for at least one enzyme that causes the accumulation of a pyrimidine deoxyribonucleoside is used, in conjunction with metabolic mutations or heterologous DNA coding for metabolic enzymes that also increase pyrimidine deoxyribonucleoside production, to engineer cultured cells to express a pyrimidine deoxyribonucleoside (PdN) in recoverable quantities, providing a commercially useful **fermentation** source for PdNs.

L18 ANSWER 9 OF 9 USPATFULL

ACCESSION NUMBER: 92:25249 USPATFULL
TITLE: Gene capable of enhancing S-adenosyl-L-methionine accumulation and process for producing S-adenosyl-L-methionine using the same
INVENTOR(S): Shiomi, Naofumi, Takasago, Japan
Fukuda, Hideki, Takasago, Japan
PATENT ASSIGNEE(S): Kanegafuchi Kagaku Kogyo Kabushiki Kaisha, Osaka, Japan (non-U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 5100786		19920331	<--
APPLICATION INFO.:	US 1988-288890		19881223 (7)	
DOCUMENT TYPE:	Utility			
FILE SEGMENT:	Granted			
PRIMARY EXAMINER:	Schwartz, Richard A.			
ASSISTANT EXAMINER:	LeGuyader, John L.			
LEGAL REPRESENTATIVE:	Armstrong, Nikaido, Marmelstein, Kubovcik and Murray			
NUMBER OF CLAIMS:	7			
EXEMPLARY CLAIM:	2,7			
NUMBER OF DRAWINGS:	5 Drawing Figure(s); 5 Drawing Page(s)			
LINE COUNT:	768			

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A gene which provides resistance to at least one methionine derivative and is capable of enhancing accumulation of S-adenosyl-L-methionine (SAM) in a cell, a hybrid plasmid having the same, a cell transformed with the above hybrid plasmid, and a process for producing SAM using the above cell. According to the present invention, SAM, which has various therapeutic effects, can be producing in a large amount at a low cost.

=> d his

(FILE 'HOME' ENTERED AT 18:19:15 ON 30 JUL 2001)

L1 FILE 'REGISTRY' ENTERED AT 18:19:27 ON 30 JUL 2001
1 S 9001-41-6/RN

FILE 'HCAPLUS' ENTERED AT 18:19:46 ON 30 JUL 2001

L2 FILE 'REGISTRY' ENTERED AT 18:19:50 ON 30 JUL 2001
SET SMARTSELECT ON
SEL L1 1- CHEM : 21 TERMS
SET SMARTSELECT OFF

L3 FILE 'HCAPLUS' ENTERED AT 18:19:51 ON 30 JUL 2001
4791 S L2
E BIOSYNTHESIS/CT
L4 5917 S PURINE NUCLEOSIDE# OR NUCLEOSIDES (L) PURINE OR PURINE RIBONU
L5 71 S L4 AND BPN/RL
L6 18 S L5 AND (ESCHERICHIA COLI OR E# COLI OR PARACOLOBACTRUM COLIFO
L7 1 S L3 AND L6
L8 1758 S L4 AND PREP/RL
L9 604 S L4 (L) PREP/RL
L10 35 S L9 AND (ESCHERICHIA COLI OR E# COLI OR PARACOLOBACTRUM COLIFO

L1 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2001 ACS
RN 9001-41-6 REGISTRY
CN Isomerase, glucose phosphate (9CI) (CA INDEX NAME)
OTHER NAMES:
CN 6-Phosphoglucose isomerase
CN Cytokines, neuroleukin
CN D-Glucose-6-phosphate isomerase
CN E.C. 5.3.1.9
CN Glucose 6-phosphate isomerase
CN Glucose phosphate isomerase
CN Glucose phosphoisomerase
CN Hexose 6-phosphate isomerase
CN Hexose isomerase
CN Hexose phosphate isomerase
CN Hexose phosphate mutase
CN Hexosemonophosphate isomerase
CN Neuroleukin
CN Oxoisomerase
CN Phosphoglucoisomerase
CN Phosphoglucose isomerase
CN Phosphohexoisomerase
CN Phosphohexomutase
CN Phosphohexose isomerase
CN Phosphosaccharomutase
MF Unspecified
CI MAN
LC STN Files: AGRICOLA, ANABSTR, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CABA,
CAPLUS, CASREACT, CEN, CHEMCATS, CHEMLIST, CIN, CSCHEM, EMBASE, IFICDB,
IFIPAT, IFIUDB, MSDS-OHS, PROMT, TOXLIT, USPATFULL
Other Sources: EINECS**, TSCA**
(**Enter CHEMLIST File for up-to-date regulatory information)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

3410 REFERENCES IN FILE CA (1967 TO DATE)
26 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
3415 REFERENCES IN FILE CAPLUS (1967 TO DATE)

ACCESSION NUMBER: 2000:316776 HCAPLUS
 DOCUMENT NUMBER: 132:344082
 TITLE: The preparation of recombinant **Escherichia coli** for manufacturing xanthosine
 INVENTOR(S): Matsui, Hiroshi; Kawasaki, Hisashi; Shimaoka, Megumi; Takenaka, Yasuhiro; Yamamoto, Yoko; Kurahashi, Osamu
 PATENT ASSIGNEE(S): Ajinomoto Co., Inc., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 23 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 INT. PATENT CLASSIF.:
 MAIN: C12N001-21
 SECONDARY: C12P019-40; C12N015-09; C12N001-21; C12R001-19
 CLASSIFICATION: 3-1 (Biochemical Genetics)
 Section cross-reference(s): 7, 10, 16
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2000135078	A2	20000516	JP 1998-308795	19981029

ABSTRACT:

Recombinant **E. coli** deficient in xanthosine phosphorylase and GMP synthetase are prepd. to promote manuf. of xanthosine (I) by the ***E*** **E. coli**. The two enzymes described above are responsible for conversion of I to xanthine and decrease of the prodn. of I. Other enzymes assocd. with exhaustion of I such as succinyl-AMP synthase are inactivated to further enhance the prodn. of I. Purine repressor function is also inactivated to enhance the prodn. of I. Prepn. of inactivated enzyme gene using known methods such as recombinant PCR recombinant **E. coli** deficient in xanthosine phosphorylase and GMP synthetase, and enhanced manuf. of I with the recombinant **E. coli** were shown.

SUPPL. TERM: xanthosine enhanced manuf recombinant **Escherichia**
 INDEX TERM: Transcription factors
 ROLE: BOC (Biological occurrence); REM (Removal or disposal); BIOL (Biological study); OCCU (Occurrence); PROC (Process)
 (gene purR; prepn. of recombinant **Escherichia coli** for manufg. xanthosine)
 INDEX TERM: Fermentation
 Metabolism, microbial
 (prepn. of recombinant **Escherichia coli** for manufg. xanthosine)
 INDEX TERM: **Purine nucleosides**
 ROLE: BPN (Biosynthetic preparation); MFM (Metabolic formation); BIOL (Biological study); FORM (Formation, nonpreparative); PREP (Preparation)
 (prepn. of recombinant **Escherichia coli** for manufg. xanthosine)
 INDEX TERM: Gene, microbial
 ROLE: BPR (Biological process); BIOL (Biological study); PROC (Process)
 (prepn. of recombinant **Escherichia coli** for manufg. xanthosine)
 INDEX TERM: **Escherichia coli**
 (recombinant; prepn. of recombinant **Escherichia coli** for manufg. xanthosine)
 INDEX TERM: **9001-41-6, Phosphoglucose isomerase** 9023-10-3 9023-55-6, GMP synthetase 9023-57-8, Succinyl-AMP synthase 9024-33-3, 6-Phosphogluconate dehydrase 9026-93-1, Adenosine deaminase 9027-68-3, Adenine deaminase 9030-21-1,

Purine nucleoside phosphorylase
9031-82-7, PRPP amidotransferase
ROLE: BOC (Biological occurrence); REM (Removal or disposal); BIOL (Biological study); OCCU (Occurrence); PROC (Process)

INDEX TERM: (prepn. of recombinant **Escherichia coli** for manufg. xanthosine)

146-80-5P, Xanthosine

ROLE: **BPN (Biosynthetic preparation)**; BIOL (Biological study); PREP (Preparation)

INDEX TERM: (prepn. of recombinant **Escherichia coli** for manufg. xanthosine)

270054-20-1	270054-21-2	270054-22-3	270054-23-4
270054-24-5	270054-25-6	270054-26-7	270054-27-8
270054-28-9	270054-29-0	270054-30-3	270054-31-4
270054-32-5	270054-33-6	270054-34-7	270054-35-8
270054-36-9	270054-37-0	270054-38-1	270054-39-2
270054-40-5	270054-41-6	270054-42-7	270054-43-8

ROLE: PRP (Properties)

(unclaimed nucleotide sequence; prepn. of recombinant **Escherichia coli** for manufg. xanthosine)